

Permit No. MI 0037486

State of Michigan  
Department of Natural Resources  
Water Resources Commission

MI-310.11  
923651 Page 1 of 9

RECEIVED

JAN 13 1981

DISCHARGE PERMIT APPLICATION

(Please print or type all information)

Section 1. Applicant and Facility Description — unless otherwise specified on this form, all items are to be completed. If an item is not applicable, indicate "NA."

Water Quality-E & TS

US EPA RECORDS CENTER REGION 5



xxxxx 923651

1. Legal Name of Applicant:

Kent County Department of Public Works

2. Mailing Address of Applicant:

number & street 1500 Scribner Avenue, N.W.

city Grand Rapids state MI zip code 49504 phone 616 774-3694  
area code number

3. Applicant's Authorized Agent for further correspondence:

name & title Curt A. Kemppainen, Assistant Director

number & street 1500 Scribner Avenue, N.W.

city Grand Rapids state Michigan zip code 49504

telephone: area code 616 number 774-3694

4. Facility/Activity: give name, ownership and physical location of the plant or other operating facility where discharge(s) does or will occur.

name Plainfield Landfill, 2908 Ten Mile Road

Grand Rapids, Michigan

ownership: \_\_\_\_\_ sole owner; \_\_\_\_\_ corporation; \_\_\_\_\_ state in which incorporation filed;

\_\_\_\_\_ partnership; ☒ governmental unit; \_\_\_\_\_ nonprofit organization.

location:

street & number 2908 Ten Mile Road, N.E.

city Grand Rapids township Plainfield

county Kent ; town 8N range R11W section 2+3

I certify that I am familiar with the information contained in this application, and to the best of my knowledge and belief, such information is true, complete and accurate. Submitted in accordance with Section 8 (b), Act 245, Public Acts of 1929, as amended.

Signature of Applicant

Date If Partnership, Signature of Co-Owner

Date

Print or Type Applicant's Name & Title

Print or Type Co-Owner's Name

Curt A. Kemppainen, Assistant Director

NOTE: If sanitary sewage is to be discharged from housing developments, apartment buildings, shopping centers, or other commercial developments, into a system other than an approved municipal sanitary waste collection system, the following should be completed and signed by an authorized municipal official or township officer.

It is the policy of the Commission that applications involving the disposal of sewage of human origin from any entity other than local government include the local government as a co-signer of the statement, and that all proceedings and hearings against said entity will include the local unit of government as a party by appropriate notice, and all permits issued as a result of such hearings and proceedings will be jointly against the said unit and entity.

Signature of Authorized Local Government Representative      Mailing Address of Local Government Representative

\_\_\_\_\_

Print or Type Name of Local Government Representative

Type II Landfill Operation

5. **Nature of Business:** describe the nature of the business or manufacturing process conducted at the plant or operating facility.

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

6. **Source of Water Supply:** indicate average water intake volume per day by sources

municipal — name _____	<u>NA</u> gallons per day
surface water intake — name _____	<u>NA</u> gallons per day
private-well _____	<u>NA</u> gallons per day
other (specify) _____	<u>NA</u> gallons per day

7. **Facility Water Usage:** average volume in gallons per day for the following types of water usage at the facility.

process water (including contact cooling water)	<u>NA</u> gallons per day
noncontact cooling water	<u>NA</u> gallons per day
sanitary water (number of people served) _____	<u>NA</u> gallons per day
other (specify) _____	<u>NA</u> gallons per day
total -----	gallons per day

	number of discharge points	total volume used or discharged — gal/day
surface water	2	54,500
municipal sanitary sewer		
municipal storm sewer		
groundwater —		
a. land application		
b. percolation system		
well injection		
other (specify)		
total		

yes \_\_\_\_\_ no \_\_\_\_\_ date submitted \_\_\_\_\_ date fully implemented \_\_\_\_\_

a. **usage:** This application contains a list of critical materials. Please indicate the amount of these materials used in, produced in, or are incidental to your operation.

[illegible]

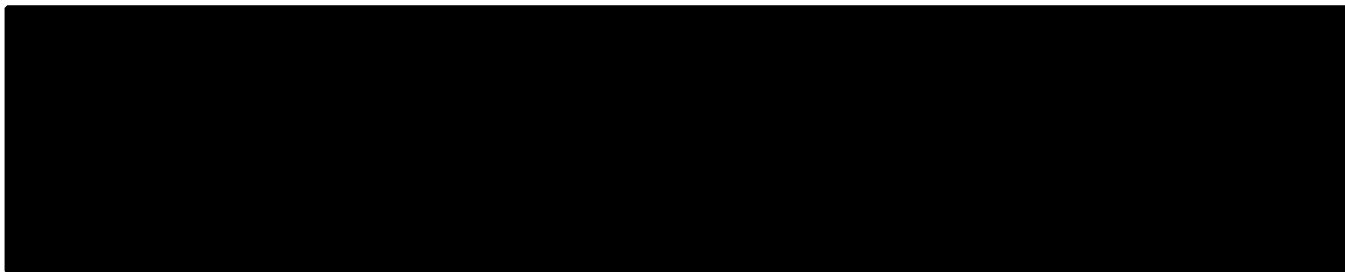
**Section II Basic Discharge Description**  
(Please print or type all information)

Complete this section for each discharge indicated in Section 1, Item 8, except those discharges which enter a municipal sanitary sewer. Separate descriptions of each discharge are required even if several discharges originate in the same facility. All values for an existing discharge should be representative of the twelve previous months of operation. If this is a proposed discharge, values should reflect best engineering estimates.

**1. Discharge Serial No. and Name**a. discharge serial number 0 0 6 (three digit code. 001, 002, etc.)b. type of waste water being discharged (Process, noncontact cooling, etc.) Groundwaterc. volume discharged 28,000 average gals/day unknown maximum gals/day**2. Discharge Location**town 8N range 11W section 2+3county Kent city or town Plainfield**3. Discharge Point Description** (If the discharge is to a county drain or storm sewer, indicate the receiving waters; e.g., Clear Lake via Mud Drain)☐ lake☒ river or streamUn-named tributary of Rogue River☐ municipal storm sewer☐ county drain☐ groundwater☐ well injection☐ other (specify)**4. Activity Description**

give a narrative description of activity producing this discharge:

- b. if subsurface disposal, land application, or oxidation pond is proposed, nearest distance to a surface watercourse: ----- feet.
- c. if discharge is to underground by injection well, include an application and/or approved permit in accordance with the provisions of Act 315, Public Acts of 1969.
- d. names and addresses of property owners adjacent to the facility:



7. **Wastewater Characteristics:** If you presently have a discharge permit, list all parameters reported on the current monthly operating report and compute monthly averages, maximum and minimum from the past twelve months. For the proposed discharge, describe the expected characteristics of the discharge after treatment.

Parameter	Monthly Average	Daily <del>Monthly</del> Maximum	Monthly Minimum	Sample Frequency	Sample Type
BOD <sub>5</sub>				Monthly	Grab
COD				Monthly	Grab
Total Iron				Monthly	Grab
Chlorides				Monthly	Grab
Total Phosphorus (as P)				Monthly	Grab
Nitrate-N				Monthly	Grab
Ammonia-N				Monthly	Grab
Oil & Grease				Monthly	Visual-Obs
pH		7.0 - 9.0 mg/l		Monthly	Grab

8. **Critical Materials Discharged:** List those critical materials not reported in Item 7 which may be present in the discharge.

Parameter	Concentration	Units
NA		

6 of 6

Unit No.

MI 0037486

Discharge Serial No.

0 0 6

Page

7 of 9

9. Plant Controls: Check if the following plant controls are available for this discharge:

NA alternate power source        alarm or emergency procedure for power or equipment failure.

10. Residuals and Residues: Are there any sludges, residues, or critical materials removed from or resulting from treatment or control of wastewaters produced by this discharge?

       yes; X no; if no is checked, continue to Item 11.

a. the physical state of the residue:

       liquid;        heavy sludge;        wet solids;        dry solids.

b. the liquid portion of the residue is primarily:

       water;        oil;        chemical solvent.

c. the residue results from:

       process wastewater;        sanitary sewage;        chemical production;  
       food processing;        machining;        dust collection;  
       paint booths;        water treatment;        other (specify).

d. estimate the total annual volume or weight of the material:

       gallons;        pounds;        cubic yards (circle one)

e. if you dispose of the material yourself, indicate the type of disposal site:

       public landfill;        private landfill;        own land;  
       shipped out of state;        incinerated;        other (specify).

f. if a public or private landfill(s) is used, give name(s) and address(es):

g. if you have the material removed by commercial waste or refuse hauler(s), give name(s) and address(es):

FISH - GAME FISH  
 ROUGH FISH  
 FORAGE FISH

AQUATIC PLANTS

PERIPHYTON

FILAMENTOUS ALGAE

MACROPHYTES

STREAMBANK  
 VEGETATION:

GRASSES

BRUSH

HERBACEOUS

CONIFERS

DECIDUOUS

BARREN

OTHER

MACROBENTHOS QUALITATIVE SAMPLE CHECK LIST (INDICATE DOMINANT GROUPS)

SPONGES	DRAGONFLIES	RATTAILED MAGGOTS
HYDRA	DAMSELFLIES	MIDGES
FLATWORMS	TRUE BUGS ✓	STONEFLIES
ROUNDWORMS	BEETLES	MAYFLIES
LEECHES	AQUATIC CATERPILLARS	-BURROWERS
WATER MITES	ALDERFLIES	-SWIMMERS
SOWBUGS ✓✓✓	HELLGRAMITES	-CLINGERS, SPRAWLERS
SCUDS	CRANEFLIES	CADDISFLIES
CRAYFISH	NO-SEE-UMS	-FREE LIVING
SNAILS-LIMPETS	BLACKFLIES ✓	-PURSE CASE MAKERS
CLAMS	DEERFLIES	-TUBE CASE MAKERS
AQUATIC EARTHWORMS	MOSQUITOES	-SADDLECASE MAKERS
	SNIPFLIES	-NET SPINNERS OR RETREATMAKERS ✓

NOTES, ETC.

Water sample results:

T.O.C. - 2.3 mg/l

BaD. - 1.7 mg/l

NH<sub>3</sub> - 0.023 mg/l

Cd - < 20 µg/l

Cr - < 50 µg/l

Cu - < 20 µg/l

Mn < 50 µg/l

Pb < 50 µg/l

Zn < 50 µg/l

Fe 360 µg/l

Station Number 1 Investigator(s) Green + Neal  
Date 6/11/82 TIME 15:22 PHOTOGRAPH NUMBER —  
BODY OF WATER no name LOCATION Wm Rd NE Kent Co MI  
COUNTY Kent T9NR W 34 SE 4 TWP Alcona - Plainfield  
REASON FOR SURVEY landfill backate impacts

VICINITY LAND USE: Mostly Forest Mostly Urban Mostly Agriculture Other landfill  
AVE. STREAM WIDTH 0.3 m AVE. STREAM DEPTH < 0.05 m VELOCITY — ms STREAM — km  
STREAM SHADING: Open Partly Open Shaded STREAM-TYPE: Coldwater damwater  
WATER TEMP. 18 °C AIR TEMP. 15 °C WEATHER: Sunny Partly Cloudy Cloudy Rainy DAM u/s: Yes No — km  
CHANNELIZED: Yes No CHANNEL EROSION: None Slight Moderate Severe HIGH WATER MARK — m  
SECCHI DISC TRANS: — m TURBIDITY: Clear Slightly Turbid Turbid Opaque WATER COLOR 10  
WATER ODORS: Normal Sewage Petroleum Chemical Other —  
SURFACE OILS: None Slick Sheen Globbs Flecks

SEDIMENT ODORS: Normal Sewage Petroleum Chemical Anaerobic Other —  
SEDIMENT OILS: Absent Slight Moderate Profuse  
DEPOSITS: Sludge Sawdust Paperfiber Sand Relict Shells Other —  
ARE THE UNDERSIDES OF STONES WHICH ARE NOT DEEPLY IMBEDDED IN SUBSTRATE BLACK? YES NO —

SUBSTRATE TYPE	FLOW VELOCITY m/sec	CHARACTERISTICS OR SIZE	PERCENT IN SAMPLING AREA	SUBSTRATE TYPE	CHARACTERISTICS OR SIZE	PERCENT IN SAMPLING AREA
BOULDERS*	>1.2 (>3 fps)	256 mm (10") dia.		CLAY	Slick texture	
RUBBLE*	>0.6 (>2 fps)	64-256 mm (2.1-10") dia.		MARL	Grey, shell fragments	
GRAVEL*	>0.3 (>1 fps)	2-64 mm (0.1-2.5") dia.		DETRITUS	Sticks, wood, coarse plant materials	
SAND	>0.2 (>0.7 fps)	0.06-2.00 mm dia. Gritty texture		FIBROUS PEAT	Partially decomposed plant material	
SILT	>0.12 (>0.4 fps)	0.004-0.006 mm dia.		PULPY PEAT	Finely divided plant material, parts indistinguishable	
MUCK-MUD	>0.12 (>0.4 fps)	black, very fine organic		LOGS & STICKS		
*IMBEDDEDNESS: 0 = NONE 1 = 1/3 OR LESS 2 = 2/3 OR MORE						

BIOTA:

PHYTOPLANKTON	<u>0</u>	1	2	3	4	SLIMES	0	1	<u>2</u>	3	4
PERIPHYTON	0	1	2	<u>3</u>	4	ZOOPLANKTON	0	1	2	3	4
FILAMENTOUS ALGAE	0	1	<u>2</u>	3	4	MACROINVERTEBRATES	0	1	2	3	4
MACROPHYTES	0	<u>1</u>	2	3	4	FISH	0	1	2	3	4

0 - Absent

1 - Sparse

2 - Moderate

3 - Abundant

4 - Profuse



FROM: John Robinson  
Biology File R

TO: Les Thomas  
Permits

SUBJECT: Request for field investigation 33-17  
OUR JOB NO.  
DATE OF MEMO: 3/24/82

**MESSAGE**

comment letter from the Plainfield Charter Twp. Kent Co. complained about degradation of a small stream receiving the groundwater leachate discharge from the Kent Co. S.P.W. Sanitary Landfill 1 mile N. # ME 0037486. Responded by explaining permit limits will protect the stream but that we would request our Biology section to investigate and make a determination regarding the stream conditions. See Attached. Signed: Les Thomas

SENDER - DO NOT WRITE BELOW THIS LINE

**REPLY**

attached are our observation and analytical results from water samples. No heavy metals were above the level of detection except iron. These levels are not greatly elevated either. Slimes were present in the stream at 10 mile Rd and indicated dissolved organic substances which are readily biodegradable. The length of stream degraded by slimes was not measured but will increase in the fall and winter. No other evaluation may be needed. Signed: Les Thomas DATE: 7/29/82

REPLY

SENDER - Retain part 2 for your follow-up, send parts 1 and 3 to addressee  
RECIPIENT - Retain part 1 and return part 3

Alpha Lab Environmental Laboratory

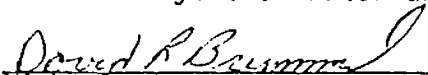
Kent Co. DPW  
1500 Scribner, N.W.  
Grand Rapids, MI 49507

July 2, 1982  
Project No. 13780  
Date Received: 6/9/82  
PO No. Verbal

Attention: Mr Lee Bartlett

	<u>Outfall 005</u>	<u>Outfall 006</u>	<u>Outfall 004</u>	<u>Outfall 007</u>
Chloride	18 mg/l	37 mg/l	13 mg/l	Dry
Iron	<u>2.4 mg/l</u>	0.04 mg/l	1.3 mg/l	"
Nitrogen Ammonia	0.2 mg/l	0.1 mg/l	<0.1 mg/l	"
Nitrogen Nitrate	0.9 mg/l	0.7 mg/l	0.2 mg/l	"
Oil Severity	0	0	0	"
Biochemical Oxygen Demand	<u>15 mg/l</u>	<2 mg/l	<u>18 mg/l</u>	"
Chemical Oxygen Demand	19 mg/l	<4 mg/l	18 mg/l	"
pH	6.3	7.4	6.4	"
Phosphorous Total	<0.02	<0.02	<0.02	"
Lab No.	010	011	012	

This report is accurate and true to the best of my ability and in accordance to procedures described in "Standard Methods for the Examination of Water and Wastewater," 15th Edition, and "EPA Methods for Chemical Analysis of Water and Wastes," March, 1979.

  
Michael Winchester, Chemist

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# Alpha Lab Environmental Laboratory

Kent County DPW  
1500 Scribner, N.W.  
Grand Rapids, MI 49504

July 26, 1982  
Project No. 12880  
Date Received: 7/9/82  
PO No. Contract

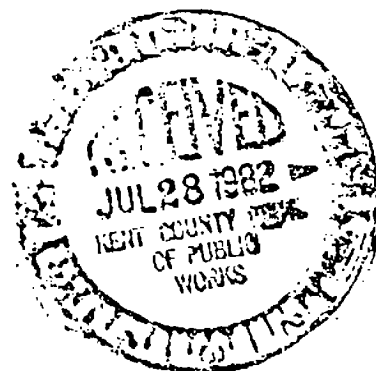
Attention: Mr. Lee Bartlett

	Outfall 004 7/9/82 2:30 p.m.	Outfall 005 7/9/82 2:30 p.m.	Outfall 006 7/9/82 2:30 p.m.
Biochemical Oxygen Demand	29 mg/l	30 mg/l	<5 mg/l
Chemical Oxygen Demand	42 mg/l	22 mg/l	<4 mg/l
Chlorides	18 mg/l	33 mg/l	42 mg/l
Iron Total	1.5 mg/l	3.4 mg/l	0.17 mg/l
Nitrogen Ammonia	<0.1 mg/l	<0.1 mg/l	<0.1 mg/l
Nitrogen Nitrate	0.1 mg/l	0.7 mg/l	0.6 mg/l
Oil Severity	0	0	0
pH	6.3	6.4	7.6
Phosphorus Total	<0.01 mg/l	<0.01 mg/l	<0.01 mg/l
Lab No.	304	305	306

This report is accurate and true to the best of my ability and in accordance to procedures described in "Standard Methods for the Examination of Water and Wastewater," 15th Edition, and "EPA Methods for Chemical Analysis of Water and Wastes," March, 1979.

*Michael Winchester*  
Michael Winchester, Chemist

jds



Alpha Lab

Leont County DPW  
1500 Scribner, N.W.  
Grand Rapids, MI 49504

July 26, 1982  
Project No. 12880  
Date Received: 7/13/82  
PO No. Contract

Attention: Mr. Lee Bartlett

	<u>Outfall 004</u> <u>7/13/82 2:00 p.m.</u>	<u>Outfall 005</u> <u>7/13/82 2:00 p.m.</u>	<u>Outfall 006</u> <u>7/13/82 2:00 p.m.</u>
Biochemical Oxygen Demand	46 mg/l	50 mg/l	5 mg/l
Chemical Oxygen Demand	46 mg/l	82 mg/l	20 mg/l
Chlorides	12 mg/l	19 mg/l	37 mg/l
Iron	0.72 mg/l	2.9 mg/l	0.06 mg/l
Nitrogen Ammonia	<0.1 mg/l	<0.1 mg/l	<0.1 mg/l
Nitrogen Nitrate	0.1 mg/l	0.4 mg/l	0.4 mg/l
Oil Severity	0	0	0
pH	5.8	5.8	7.5
Phosphorus Total	0.02 mg/l	<0.01 mg/l	<0.01 mg/l
Lab No.	334	335	336

This report is accurate and true to the best of my ability and in accordance to procedures described in "Standard Methods for the Examination of Water and Wastewater," 15th Edition, and "EPA Methods for Chemical Analysis of Water and Wastes," March, 1979.

*Michael Winchester*  
Michael Winchester, Chemist

jds

Alpha Lab Environmental Laboratory

Kent County DPH  
1500 Scribner, N.W.  
Grand Rapids, MI 49504

July 30, 1982  
Project No. 12880  
Date Received: 7/21/82  
PO No. Contract

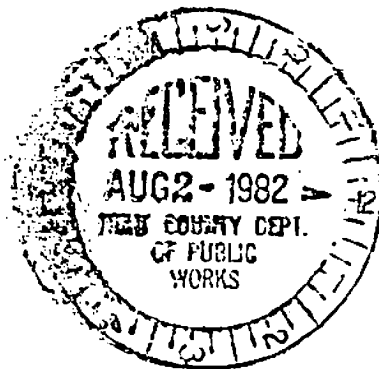
Attention: Mr. Lee Bartlett

	<u>Outfall 004</u> <u>7/21/82 10:25 a.m.</u>	<u>Outfall 005</u> <u>7/21/82 10:10 a.m.</u>	<u>Outfall 006</u> <u>7/21/82 10:30 a.m.</u>
Biochemical Oxygen Demand	29 mg/l	15 mg/l	<4 mg/l
Chemical Oxygen Demand	34 mg/l	19 mg/l	28 mg/l
Chloride	30 mg/l	44 mg/l	84 mg/l
Lab No.	388	389	390

This report is accurate and true to the best of my ability and in accordance to procedures described in "Standard Methods for the Examination of Water and Wastewater," 15th Edition, and "EPA Methods for Chemical Analysis of Water and Wastes," March, 1979.

*Michael Winchester*  
Michael Winchester, Chemist

jds



*P.L.D.*

Alpha Lab Water and Wastewater Lab

Kent County DPM  
1500 Scribner, N.W.  
Grand Rapids, MI 49504

August 2, 1982  
Project No. 12880  
Date Received: 7/28/82  
PO No. Contract

Attention: Mr. Lee Bartlett

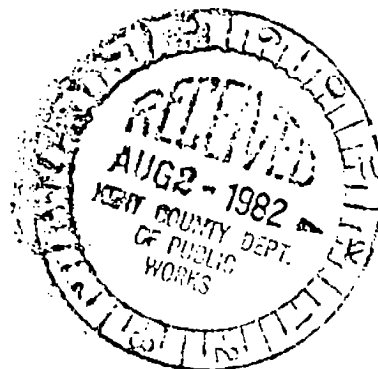
Samples <u>Taken 7/28/82</u>	Outfall 004 <u>11:00 a.m.</u>	Outfall 005 <u>11:00 a.m.</u>	Outfall 006 <u>12:00 a.m.</u>
Biochemical Oxygen Demand	<u>28 mg/l</u>	<u>13 mg/l</u>	<u>11 mg/l</u>
Chemical Oxygen Demand	40 mg/l	10 mg/l	<4 mg/l
Chlorides	25 mg/l	37 mg/l	75 mg/l
Lab No.	424	425	426

*MOST LIKELY  
INCORRECT*

This report is accurate and true to the best of my ability and in accordance to procedures described in "Standard Methods for the Examination of Water and Wastewater," 15th Edition, and "EPA Methods for Chemical Analysis of Water and Wastes," March, 1979.

*Michael Winchester*  
Michael Winchester, Chemist

jds



RD OF PUBLIC WORKS  
OF THE COUNTY OF KENT

Mr. John Bantjes  
August 10, 1982  
Page 2

3. Based on past data and the general rule that BOD is less than COD, the BOD for outfall 006 received on July 28, 1982, is most likely incorrect and is noted as such on the attached sheets.
4. Analysis of monitor wells dated June 16, 1982, does not indicate any types of similar problems which have occurred at outfalls 004 and 005.

Further investigation will take place to bring the outfall parameters within specified limits; however, it does seem apparent that with the bacterial problem and continued high temperatures of the summer, it will probably be several months before these limits are again met.

If you have any further questions or comments, please contact me at 774-3693.

Sincerely,

KENT COUNTY DEPARTMENT OF PUBLIC WORKS



Lee A. Bartlett, P.E.  
Civil Engineer

LAB/srm  
Enclosures

cc: DNR-Lansing  
U.S.E.P.A.-Region V  
D. Lamoreaux

# BOARD OF PUBLIC WORKS OF THE COUNTY OF KENT

1500 Scribner Ave., N.W. Grand Rapids, Michigan 49504

Telephone: (616) 774-3694

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Margaret E. Byington	Vice Chairman
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David R. Despres	Director
Department of Public Works	

August 10, 1982

Mr. John Bantjes  
State of Michigan  
Department of Natural Resources  
State Office Building  
350 Ottawa Avenue, N.W.  
Grand Rapids, Michigan

RE: Non-Compliance Notification  
NPDES Permit Number MI 0037486  
Plainfield Township Landfill

Dear Mr. Bantjes:

Attached are the most recent results of analysis for outfalls at the above referenced site. I have "boxed in" the parameters which have exceeded the maximum monthly effluent limitations for the month of July, 1982. Please note that although we had not received the new permit until June 28, 1982, we initiated weekly sampling (as required by the new permit) of outfalls based on samples taken on June 9, 1982, and whose results were reported to us on July 2, 1982. Also note that to date, the effluent limitations for outfalls 006 and 007 (the final point of discharge) have not been exceeded.

The following items of information are to bring you up to date on the current situation and to satisfy part two, section a, item 4, "Non-Compliance Notification", of our NPSED Permit:

1. My last letter dated May 4, 1982, should be corrected. The outfall referred to in that letter as 006 should be 005, and the outfall 007 should be 006.
2. As the seasonal increase in temperature arrived, a reddish-brown slime on the walls of the underdrain pipe was observed. In order to clean the pipe and curb the apparent bacterial growth on the pipe walls, the underdrain lines were cleaned and chlorinated with a sewer jet truck on July 14, 1982. This was done by mixing a 500 ppm solution of chlorine in the jet truck's water tank. Keep in mind that these pipes are perforated and cannot be chlorinated as in normal procedures. Comparing the results of samples received on July 13, 1982, with those received on July 21, 1982, indicates the cleaning reduced the BOD, but at the same time, resulted in higher chloride concentrations.



# MICHIGAN WATER RESOURCES COMMISSION FACILITY INSPECTION REPORT

FACILITY  PLAINFIELD TWP LANDFILL KENT COUNTY DPW 2908 TEN MILE ROAD NE PLAINFIELD TWP MI	REGION  2	DISTR.  3	FACILITY  104  410294	PERMIT  MI0037486	RATING  NOT RATED
LAST VISIT					
TYPE  1		DESCRIPTION  ENFORCEMENT		DATE  11 / 80	REASON  A
CPEFATOR - NUMBER					
OPERATOR NOT ESTABLISHED					
CURRENT VISIT					
REASON  F		DATE  11 / 09 / 82		FOLLOW-UP DATE	NO. OF VISITS  01

RATING FOR THIS INSPECTION:  
 FACILITY CLASSIFICATION: A2F  
 OPERATOR NOT CLASSIFIED

## OUTFALL NUMBERS AND DESCRIPTIONS

410296	001	DEWATERING WELL TB 35
410297	002	DEWATERING WELL TB 39
410298	003	DEWATERING WELL TB 33
410299	004	CENTER DEWATERING DRAIN
410300	005	EAST DEWATERING DRAIN
410301	006	EAST CULVERT AT 10 MILE RD
410302	007	WEST CULVERT AT 10 MILE RD
410303	000	LEACHATE HOLDING FACILITY

VISITED THE SITE WITH LEE BARTLETT, RE. OF THE KENT COUNTY DEPARTMENT OF PUBLIC WORKS. OUTFALL 007 WAS DRY (NO FLOW), EVEN THOUGH IT RAINED DURING THE INSPECTION TOUR. OUTFALL 006 HAD A NORMAL WET WEATHER FLOW; NO TURBIDITY NOTED VISUALLY. OUTFALLS 004 AND 005 FLOWED AT A RATE OF 10-15 G.P.M. RED IRON BACTERIA DEPOSITS WERE PRESENT AT BOTH OUTFALLS. THIS IS COMMON WITH DISCHARGES OF GROUNDWATER IN THE WEST MICHIGAN AREA. THE DISCHARGE WATER WAS CLEAR AND COLORLESS WITH NO ODOR OR OTHER EVIDENCE OF LEACHATE CONTAMINATION.

IN ADDITION TO SAMPLING THE ON-SITE MONITORING WELLS THE KENT COUNTY DEPARTMENT OF PUBLIC WORKS HAS SAMPLED AREA RESIDENTIAL WELLS IN COOPERATION WITH THE LOCAL AND STATE HEALTH DEPARTMENTS.

INSPECTED BY:

*John S. Smith*

ANY CHANGES REQUIRED ON WISER FILE

**RECEIVED**

NOV 12 1982

WQD  
POLLUTION CONTROL

# BOARD OF PUBLIC WORKS OF THE COUNTY OF KENT

1500 Scribner Ave., N.W. Grand Rapids, Michigan 49504

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David R. Despres, P.E. Director  
Department of Public Works

January 6, 1983

State of Michigan  
Department of Natural Resources  
Data Center  
Box 30028  
Lansing, MI 48909

RE: Kent County Department of Public Works  
December, 1982, Monthly Operating Reports

Gentlemen:

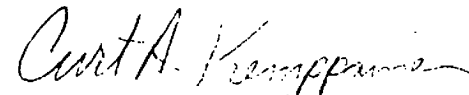
Enclosed for your information are the Monthly Operating Reports for the Plainfield Township Landfill for the month of December, 1982.

During the month of December, 140,000 gallons of leachate were transported to the North Kent Sewage Disposal System from the Plainfield Township Landfill. At the present time, we are utilizing thirty (30) cells.

If you should have any questions or comments regarding this matter, please do not hesitate to contact Mr. Lee Bartlett at the above referenced phone number or address.

Sincerely,

KENT COUNTY DEPARTMENT OF PUBLIC WORKS



Curt A. Kempainen  
Assistant Director

srm  
Enclosures

cc: D. Lamoreaux

## Final Effluent Limitations

During the period beginning upon issuance of this permit and lasting until expiration of the permit, the permittee is authorized to discharge up to one-hundred thousand (100,000) gallons per day of dewatering groundwater plus an undetermined amount of storm runoff from outfalls 006 and 007 to unnamed tributaries to the Rogue River. Each discharge shall be limited and monitored by the permittee as specified below:

Effluent Characteristic	Discharge Limitations				Monitoring Requirements	
	kg/day (lb/day)		Other Limitations		Measurement Frequency	Sample Type
	Monthly Average	Daily Maximum	Monthly Average	Daily Maximum		
BOD <sub>5</sub>					Monthly **	Grab
COD					Monthly **	Grab
Total Iron					Monthly	Grab
Chlorides					Monthly **	Grab
Total Phosphorus (as P)					Monthly	Grab
Nitrate-N					Monthly	Grab
Ammonia-N					Monthly	Grab
Outfall Observation*					Monthly	Visual

\*Any unusual characteristics of the discharge which would not be expected from natural runoff and groundwater dewatering water (e.g., turbidity, discoloration, oil film, suspended matter, etc.) shall be reported immediately to the District Office of the Water Quality Division followed with a written report within 5 days detailing the findings of the investigation and the steps taken to correct the condition.

\*\*In the event the concentrations of BOD<sub>5</sub>, COD, or chlorides parameters exceeds the limits as set forth for outfalls 004 and 005 in Part I, A-1 for two consecutive weeks, monitoring frequency for outfalls 006 and 007 shall be weekly instead of monthly and shall continue as weekly until the concentrations for BOD<sub>5</sub>, COD or chlorides are each at or below the limits specified in Part I, A-1.

a. The pH shall not be less than 6.0 nor greater than 9.0. The pH shall be monitored as follows: monthly; grab.

b. The discharge shall not cause excessive foam in the receiving waters. The discharge shall be essentially free of floating and settleable solids.

c. The discharge shall not contain oil or other substances in amounts sufficient to create a visible film or sheen on the receiving waters.

d. Samples taken in compliance with the monitoring requirements above shall be taken on the upstream side of the culverts in Ten Mile Road, receiving the surface drainage from the landfill site.

## PART I

## EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

## 1. Final Effluent Limitations

During the period beginning upon issuance of this permit and lasting until expiration of this permit, the permittee is authorized to discharge up to fifty thousand (50,000) gallons per day of dewatering groundwater from each outfall 004 and 005 to unnamed tributaries to the Rogue River. Each discharge shall be limited and monitored by the permittee as specified below:

Effluent Characteristic	Discharge Limitations				Monitoring Requirements	
	M <sup>3</sup> /day (Gls/day)		Conc. Limitations		Measurement Frequency	Sample Type
	Monthly Average	Daily Maximum	Monthly Average	Daily Maximum		
Flow, M <sup>3</sup> /Day (MGD)					Twice Monthly	Report total daily flow
BOD <sub>5</sub>		0.9(2.0)		5 mg/l	Weekly	Grab
COD		7.6(16.7)		40 mg/l	Weekly	Grab
Total Iron		0.38(0.8)		2.0 mg/l	Twice Monthly	Grab
Chlorides		9.5(20.9)		50 mg/l	Weekly	Grab
Total Phosphorus (as P)		0.09(0.2)		0.5 mg/l	Twice Monthly	Grab
Nitrate-N		0.19(0.4)		1.0 mg/l	Twice Monthly	Grab
Ammonia-N		0.19(0.4)		1.0 mg/l	Twice Monthly	Grab
Outfall Observation*					Daily	Visual

\*Any unusual characteristics of the discharge which would not be expected from groundwater dewatering (e.g., turbidity, discoloration, oil film, suspended matter, etc.) shall be reported immediately to the District Office of the Water Quality Division, followed with a written report within 5 days detailing the findings of the investigation and the steps taken to correct the condition.

a. The pH shall not be less than 6.0 nor greater than 9.0. The pH shall be monitored as follows: twice monthly; grab.

b. The discharge shall not cause excessive foam in the receiving waters. The discharge shall be essentially free of floating and settleable solids.

c. The discharge shall not contain oil or other substances in amounts sufficient to create a visible film or sheen on the receiving waters.

d. Samples taken in compliance with the monitoring requirements shall be taken at the outlets of the center and east dewatering drains (outfalls 004 & 005 respectively).

MICHIGAN WATER RESOURCES COMMISSION  
AUTHORIZATION TO DISCHARGE UNDER THE  
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

In compliance with the provisions of the Federal Water Pollution Control Act, as amended, (33 U.S.C. 1251 et seq; the "Act"), and the Michigan Water Resources Commission Act, as amended, (Act 245, Public Acts of 1929, as amended, the "Michigan Act"),

Kent County Department of Public Works  
1500 Scribner Avenue, N.W.  
Grand Rapids, Michigan 49504

is authorized to discharge from a facility located at  
2908 Ten Mile Road, N.E.  
NW 1/4, W 1/2 of Sec. 2 & NE 1/4 of Sec. 3  
T 8 N, R 11 W  
Plainfield Township, Kent County

to receiving water named -unnamed tributaries to the Rogue River


in accordance with effluent limitations, monitoring requirements and other conditions set forth in Parts I and II hereof.

This permit shall become effective on the date of issuance and shall be final in the absence of a request for a hearing filed within 15 days after receipt thereof.

This permit and the authorization to discharge shall expire at midnight, February 28, 1987. In order to receive authorization to discharge beyond the date of expiration, the permittee shall submit such information and forms as are required by the Michigan Water Resources Commission no later than 180 days prior to the date of expiration.

This permit is based on the Company's application dated January 7, 1981, and shall supersede any and all Orders of Determination, Stipulation, or Final Orders of Determination previously adopted by the Michigan Water Resources Commission.

Issued this 22nd day of June, 1982, for the Michigan Water Resources Commission, superseding NPDES Permit No. MI 0037486 expiring April 30, 1981.

  
Robert J. Courchain  
Executive Secretary